



A Study to asses and compare patients characteristics and maternal and perinatal outcome in pregnancy complicated by APH due to placenta praevia and placenta abruption at teaching hospital, Bikaner, Rajasthan

Authors

Kamlesh Yadav¹, Pratibha², Deval Rathore^{3*}

¹Professor, ^{2,3}Resident Doctor,

Deptt of Obstetrics & Gynecology, S.P. Medical College & PBM Hospital, Bikaner

Corresponding Author

Deval Rathore

Resident Doctor, Deptt of Obstetrics & Gynecology, S.P. Medical College & PBM Hospital, Bikaner

Abstract

Background: *Placenta praevia and Abruptio placenta are the two major causes of antepartum haemorrhage worldwide and in india as well.*

Methods: *The material for this study comprises of 200 cases of antepartum haemorrhage admitted in PBM Hospital, Bikaner from Dec.2015 to Nov.2016. Out of 200 cases of APH 100 cases were of placenta praevia and 90 were of abruptio placenta.*

Results: *Maxium case of placenta praevia and abruption placenta in <20 Yrs age group. Maxium case of placenta praevia in multipara. 38.18% case of placenta praevia delivered by LSCS.*

Conclusion: *Antepartum haemorrhage is a major cause of maternal and perinatal morbidity and mortality which could be prevented by early registration, regular antenatal care, early detection of high risk cases, and early referral to higher centre.*

Keywords: *Antepartum haemorrhage, abruption placentae, placenta praevia, post partum haemorrhage.*

Introduction

Placenta praevia and Abruptio placenta are the two major causes of antepartum haemorrhage worldwide and in india as well. They contribute significantly to obstetric haemorrhage, which is a leading cause of maternal mortality in india.

Placenta praevia which is an implantation of the placenta in the lower uterine segment below the presenting part covering or lying very close to internal os has an incidence of 1 in 200 pregnancies. Risk factors associated with it are grandmultiparity, advancing maternal age,

multiparity, multiple pregnancies, history of previous placenta praevia, previous uterine curettage, prior uterine scar, smoking and use of cocaine^{1,2}.

Abruptio placenta which is the premature separation of a normally implanted placenta from the uterine wall prior to delivery has an incidence of 1 in 120 pregnancies. Associated risk factors are hypertension in pregnancy, rapid decompression of an over distended uterus, trauma, increasing parity and maternal age, history of abruptio placenta, smoking and cocaine use³.

Placenta praevia and abruptio placenta account for one fourth of all perinatal mortalities and have been associated with prematurity as well as fetal growth restriction. They have also been associated with maternal mortalities and morbidities like hypovolaemic shock, disseminated intravascular coagulation, ischaemic damage of distant organs like the pituitary and kidneys and couvalaire uterus⁴.

Material and Methods

The material for this study comprises of 200 cases of antepartum haemorrhage admitted in PBM Hospital, Bikaner from Dec.2015 to Nov.2016. Out of 200 cases of APH 100 cases were of placenta praevia and 90 were of abruptio placenta. After taking an informed consent, patient were kept under surveillance until delivery and the consequences of pregnancy were evaluated by close observation and follow up.

Inclusion Criteria

- Patients with bleeding per vagina after 28 weeks of gestation and above till the end of second stage of labour.
- APH due to placenta praevia or abruptio placenta.

Exclusion criteria

- Gestational age less than 28 weeks.
- Bleeding other than placenta praevia or abruptio placenta.

Results

Table no.1. Age distribution.

Age group (Yrs)	Placenta praevia		Abrutio placenta	
	No	%	No	%
<20	50	45.45	59	65.55
21-25	43	39	22	24.22
26-30	12	10.90	5	5.55
31-35	5	4.54	4	4.44
Total	110	100	90	100
Mean age	26.65		25.23	
SD	4.46		4.65	

Table no.2. Gravida wise distribution of cases.

Gravida	Placenta praevia		Abrutio placenta	
	No	%	No	%
1	18	16.36	33	36.67
2-4	72	65.45	49	54.44
>4	20	18.18	8	8.89
Total	110	100	90	100

Table no.3. Risk factor wise distribution of cases

Various risk factor	Placenta praevia		Abrutio placenta		P-value
	No	%	No	%	
Previous caesarean section	30	27.27	5	5.55	.001
History of evcution	19	17.27	6	6.66	.074
History of trauma	0	0	4	4.44	.093
Hypertension in present pregnancy	5	4.5	40	44.44	.0001

Table .4. Maternal complication

Maternal complication	Placenta praevia		Abrutio placenta		P-value
	No	%	No	%	
Malpresentation	6	5.45	5	5.55	.652
LSCS	42	38.18	40	44.44	.70
Blood transfusion	64	58.18	36	40.00	0.135
PPH	28	25.45	26	28.89	.796
Hypovolemic shock	18	16.36	18	20	.709
ICU	3	2.72	13	14.44	0.011
HELLP Syndrome	0	0	3	3.33	0.189
DIC	1	0.90	6	6.66	.082
Death	2	1.81	1	1.11	.856

Table .5 Perinatal outcome

Perinatal outcome	Placenta praevia		Abrutio placenta	
	No	%	No	%
Healthy	74	67.27	47	52.22
Neonatal death	17	15.45	17	18.88
IUD	9	8.18	14	15.15
SB(still born)	10	9.09	12	13.13
P-value = 0.196				

Discussion

In the day to day practice, an obstetrician has to tackle life threatening condition of APH and take a timely judicious decision of terminating pregnancy, keeping in mind the welfare of both the mother and the fetus without exposing either of them to undue risk.

Maximum cases of placenta praevia and abruptio placenta were in age <20 yrs. Which is similar to Pedowitz et ⁵ and Das et al⁶ studies.

Incidence of APH in multigravida were more common than primigravida in our study. Cotton et al⁷ high incidence in multipara.

In our study 38.8% cases of placenta praevia were delivered by C. section. All obstetricians agree that early and timely caesarean section improve perinatal salvage in patients with abruption placentae⁸.

In present study the incidence of PPH is 25.45% in placenta praevia which is correlated with the study conducted by Cotton et al⁷.

Maternal mortality due to placenta previa is 1.81% and due to abruption is 1.00%. Similar to study done by Pedowitz et al⁵

Conclusion

Antepartum haemorrhage is a major cause of maternal and perinatal morbidity and mortality which could be prevented by early registration, regular antenatal care, early detection of high risk cases, and early referral to higher centre. Good facilities for caesarean section, availability of blood banks. Use of contraceptives can improve maternal and perinatal outcome of APH.

Bibliography

1. B Solomons, the dangerous multgipara. Lancet 2 (1934), pp 8-11.
2. PA King, SJ Duthie and HK Ma, Grandmultiparity: a reappraisal of risks. Int. J Gynaecol Obstet 36 (1994), pp 13-16.
3. DS Seidman, Y Armor, D Roff, DK Stevenson and R Gale , Grand multiparity: an obstetric or neonatal risk factor?. Am J Obstet Gynecol 158 (1988), pp. 1034–1039. View Record in Scopus | Cited By in Scopus (25).
4. A Eidelman, R Kamar, MS Schimmel and B Eichanan , The grandmultipara: is she still at risk?. Am J Obstet Gynecol 158 (1988), pp. 389–392. View Record in Scopus | Cited By in Scopus (29).
5. edowitz P. Placenta previa; an evaluation of expectant management and the factors

responsible for fetal wastage. An J Obstetr & Gynecol. 1965;93:16-25.

6. Das B. Antepartum haemorrhage in three decades. J Obstetr &Gynecol India. 1975;25:636-7.
7. Cotton DB, Read JA, Paul RH, Quilligan EJ. The conservative aggressive management of placenta previa. Am J Obstetr Gynecol. 1980;137:687.
8. Kayani SI, Walkinshaw SA, Preston C. Pregnancy outcome in severe placental abruption. Br J Obstetr Gynaecol. 2003;110:679-83.